Product datasheet

Anti-TPH2 antibody ab111828

Overview

Product name: Anti-TPH2 antibody
Description: Rabbit polyclonal to TPH2
Host species: Rabbit
Tested applications: Suitable for: WB, IP, ICC, IHC-FoFr
Species reactivity: Reacts with: Mouse, Rat, Rabbit, Human, Non human primates

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer: Preservative: 0.1% Sodium azide
Constituent: 0.1% BSA
Purity: Protein A purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab111828 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>1/1000</td>
<td>Detects a band of approximately 56 kDa (predicted molecular weight: 56 kDa).</td>
</tr>
<tr>
<td>IP</td>
<td>1/1000</td>
<td></td>
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</tbody>
</table>
Tissue specificity

Brain specific.

Pathway

Aromatic compound metabolism; serotonin biosynthesis; serotonin from L-tryptophan: step 1/2.

Involvement in disease

Genetic variation in TPH2 may influence susceptibility to major depressive disorder (MDD) [MIM:608516]. Defects in TPH2 are the cause of susceptibility to attention deficit-hyperactivity disorder type 7 (ADHD7) [MIM:613003]. ADHD is a neurobehavioral developmental disorder and is primarily characterized by the co-existence of attentional problems and hyperactivity, with each behavior occurring infrequently alone. Note=Naturally occurring variants of TPH2 with impaired enzyme activity could cause deficiency of serotonin production and result in an increased risk of developing behavioral disorders.

Sequence similarities

Belongs to the biopterin-dependent aromatic amino acid hydroxylase family. Contains 1 ACT domain.

Immunoprecipitation analysis of Raphe Nuclei isolated from Sprague-Dawley, precipitating ab111828 coupled to magnetic beads, which was introduced to whole cell extracts at room temperature for 15 mins. Immunoprecipitated proteins were assessed by Western blotting.

Lane 1 (Positive Control): Non-immunoprecipitated brain lysates were probed with ab111828.

Lane 2 (ab111828 Ms TPH2): Immunoprecipitated Proteins

Lane 3 (Sheep TPH2 antibody): Immunoprecipitated Proteins

Lane 4 (Negative Control => Anti-Tyrosine Hydroxylase antibody): Immunoprecipitated proteins

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<tr>
<td>ICC</td>
<td>1/500</td>
<td></td>
</tr>
<tr>
<td>IHC-FoFr</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration.</td>
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Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-TPH2 antibody (ab111828)

This image is courtesy of an Abreview submitted by Jason Teem

ab111828 staining TPH2 in Mouse dorsal raphe coronal brain slices tissue sections by Immunohistochemistry (PFA perfusion fixed frozen sections). Tissue samples were fixed by perfusion with paraformaldehyde, permeabilized with 0.3% Triton X-100, blocked with 2% serum for 30 minutes at 22°C and antigen retrieval was by heat mediation in citrate buffer. The sample was incubated with primary antibody (1/800 in PBS + Triton X-100 + serum) at 22°C for 24 hours. An Alexa Fluor® 488-conjugated Goat anti-rabbit IgG polyclonal (1/500 in PBS + Goat serum) was used as the secondary antibody.

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